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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/207,136	12/08/1998	DARRYN MCDADE	97-S-159	6383

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STMICROELECTRONICS, INC.
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EXAMINER

CHIEU, PO LIN

ART UNIT	PAPER NUMBER
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2615

DATE MAILED: 04/21/2004

17

Please find below and/or attached an Office communication concerning this application or proceeding.

2

Office Action Summary

Application No.

09/207,136

Applicant(s)

MCDADE ET AL.

Examiner

Polin Chieu

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 11-20, 25-27 and 31-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 11-20, 25-27 and 31-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see pages 15-16, filed 2/24/04, with respect to the rejection(s) of claim(s) 1, 20, and 25 under 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn.

Nakai et al teaches that a title consist of one chapter or more (col. 35, lines 11-48). Each title contains a plurality of files (fig. 10). However, the examiner does not believe that Nakai et al discloses, "enabling the selection of a particular file". The examiner believes that the file navigator must allow the selection any one of the files to satisfy "enabling the selection of a particular file". Since Nakai et al does not disclose that each file (fig. 10) in a title set is a chapter the limitations are not met. In other words, a chapter in a title set may consist of a single file or several files. In the case that a chapter includes several files, any one of the files cannot be selected because navigation is based on chapters.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 5-6, 8, 14-17, 20, 25-26, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Omata et al (5,982,979) in view of Sawabe et al (5,933,569).

Regarding claim 1, Omata et al discloses a file reader capable of obtaining any of one or more encoded audio/video data streams from a data source utilizing a file system (col. 2, lines 52-57); a file navigator enabling selection of a particular file on the data source and instructing a file reader to obtain a selected encoded audio/video data stream from the data source (col. 3, line 26 – col. 4, line 57). However, Omata et al does not disclose a splitter and a reprogrammable proxy filter.

Sawabe et al teaches a splitter separating the encoded A/V data stream into one or more component data streams; and a reprogrammable proxy filter decoding and converting the one or more component data streams into three or more renderable signals including at least one audio signal and at least two video signals (87-95, fig. 16).

It would have been highly desirable to have a reprogrammable proxy filter so that the video data could have audio and sub-picture data related to the video included on the storage medium. The addition of audio and sub-picture to video allows the user to gather more information on the events shown in the video. It would have been highly desirable to have a splitter separating the A/V data stream so that the data is sent to the corresponding decoder. For example, a video decoder cannot decode audio data. Therefore, if the audio data is not separated from the video data it cannot be decoded because it would have been sent to the video decoder.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to have a splitter and a reprogrammable proxy filter in the device of Omata et al.

Regarding claim 2, Omata et al does not explicitly disclose a user interface connected to the file navigator for selecting a file containing the encoded A/V data stream to be obtained. However, Omata et al discloses that the user may select the A/V signal to be obtained (col. 43, lines 27-39). If the user can select an A/V signal the device must inherently have a user interface.

Regarding claim 3, Omata et al does not disclose that the user interface comprises more than one predefined function for selecting an A/V signal to be obtained.

Sawabe et al teaches that the user interface comprises more than one predefined function for selecting an A/V signal to be obtained (fig. 17, i.e. parental control).

It would have been highly desirable to have a user interface with more than one predefined function for selection an A/V signal so that a plurality of parental levels could be selected.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to have more than one predefined function in the device of Omata et al.

Regarding claim 5, Omata et al discloses a video stream (fig. 5). However, Omata et al does not disclose an audio data stream a sub-picture data stream, and a navigation data stream.

Sawabe et al discloses an audio data stream (93, fig. 16), a video data stream (88), a sub-picture data stream (90), and a navigation data stream (95).

It would have been highly desirable to have an audio data stream, sub-picture data stream, and navigation data stream so that additional data corresponding to the video data is included.

Therefore, it would have been highly desirable to a person of ordinary skill in the art at the time of the invention to have an audio data stream, sub-picture data stream, and navigation data stream in the device of Omata et al.

Regarding claim 6, Omata et al discloses selecting the file containing the encoded A/V data stream to be obtained according to one or more selection signals received from the user interface (please refer to the art rejection of claim 2). However, Omata et al does not disclose a file navigator coupled to the splitter that can use the navigation data stream.

Sawabe et al teaches that the file navigator is coupled to the splitter (86) such that the file navigator (100, fig. 16) can use the navigation data stream to select the file.

It would have been highly desirable to have the file navigator coupled to the splitter so that the navigation data can be used to select a desired stream (col. 16, line 57 – col. 17, line 7).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to have the file navigator coupled to the splitter in the device of Omata et al.

Regarding claim 8, Omata et al does not disclose MPEG data.

Sawabe et al teaches that the reprogrammable proxy filter can decode and convert a component data stream that conforms to a MPEG coding standard (col. 7, lines 13-20). Note that the claim only requires "one or more of" the coding standards to be met.

It would have been highly desirable to have MPEG data because MPEG is a common standard used and the device would thereby provide video data that is compatible with various devices.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to have MPEG data in the device of Omata et al.

Regarding claims 14-16, Omata et al does not disclose a renderable audio signal; a renderable sub-picture signal; a mixer; and a reprogrammable proxy filter for synchronizing the signals.

Sawabe et al teaches a renderable audio signal (S_{add} , fig. 16); a renderable video signal (S_{vd}); a renderable sub-picture signal (S_{spd}); a mixer for combining the sub-picture signal with the video signal and producing a combined signal (91, fig. 16); a reprogrammable proxy filter comprising a function for synchronizing the three or more renderable signals (col. 17, lines 30-64).

It would have been highly desirable to have a mixer so that sub-picture data (i.e. titles, sub-titles, etc.) are combined with the video signal. It would have been highly desirable to synchronize the signal so that audio and sub-picture data are correctly presented with the video data.

Therefore, it would have been obvious to a person of ordinary skill at the time of the invention to have a mixer and reprogrammable proxy filter in the device of Omata et al.

Regarding claim 17, Omata et al does not disclose an audio renderer and a video renderer.

Sawabe et al teaches an audio renderer (93) coupled to the reprogrammable proxy filter and an audio application program interface (internal hardware or software controlling audio decoding in the audio decoder), the audio renderer controlling the manipulation and rendering of an audio signal from the three or more renderable signals (col.17, lines 30-64); and a video renderer (88) coupled to the reprogrammable proxy filter and a video application program interface (internal hardware or software controlling video decoding in the video decoder), the video renderer controlling the manipulation and rendering of a video signal from the three or more renderable signals (col. 17, lines 30-64).

It would have been highly desirable to have an audio renderer and a video renderer so that the video data could be presented with audio data.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to have an audio renderer and a video renderer in the device of Omata et al.

Regarding claim 20, Omata et al discloses a file reader capable of obtaining any of one or more encoded audio/video data streams from a data source utilizing a file system; and a navigator enabling selection of a particular file on the data source and

instructing the file reader to obtain a selected encoded audio/video data stream from the data source (col. 3, line 26 – col. 4, line 57). Sawabe et al teaches a user interface connected to the navigator and having one or more predefined functions for selection an encoded audio/video data stream to be obtained (98); a splitter (86), the navigator (100) being coupled to the splitter (80) such that the navigator can use the navigation data stream to select the encoded A/V data stream to be obtained; an audio filter (93); a video filter (88); a subpicture filter (90); a mixer (91); a synchronizing filter, an audio renderer, and a video renderer (col. 17, lines 30-64), as discussed in the previous rejections.

Regarding claim 25, Omata et al discloses a file reader and a navigator (col. 3, line 26 – col. 4, line 57). Sawabe et al teaches a DVD drive (fig. 16); a splitter (86); a reprogrammable proxy filter (87-95); and a mixer combining the at least two video signals (91). The audio and video renderer were discussed in the art rejection of claim 17; and enabling the selection of a particular file on the data source was discussed in the art rejection of claim 1. Please refer to the art rejection of claims 1 and 17.

The limitations of claim 26 where discussed in the art rejection of claim 2. Please refer to the art rejection of claim 2.

The limitations of claim 32 where discussed in the art rejection of claim 16. Please refer to the art rejection of claim 16.

4. Claims 4, 19, and 27 rejected under 35 U.S.C. 103(a) as being unpatentable over Omata et al in view of Sawabe et al and Nakai et al (5,999,698).

Regarding claim 4 and 27, Omata et al does not disclose predefined functions including play, pause, menu, stop, previous, and next.

Nakai et al teaches a user interface selecting the A/V signal to be obtained using the predefined functions play (5c), pause (5d), menu (5n), previous (5f), and next (5f) in figure 8.

It would have been highly desirable to predefine functions (i.e. play, pause, menu, previous, and next) supported by a user interface so that the user has a plurality of options for controlling the device.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to have play, pause, menu, previous, and next functions on a user interface in the device of Omata et al.

Regarding claim 19, Omata et al does not disclose a DVD device driver; and a DVD drive, wherein the file reader accesses the DVD through the DVD device driver and DVD drive.

Nakai et al teaches that the data source is a DVD; a DVD device driver (50, fig. 1); and a DVD drive (30), wherein the file reader accesses the DVD through the DVD device driver and DVD drive.

It would have been highly desirable to have a DVD device driver and a DVD drive so that the decoder is able to access data stored on a DVD.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to have a DVD device driver and a DVD drive in the device of Omata et al.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Omata et al in view of Sawabe et al and Zdepski et al (5,825,884).

Regarding claim 7, Omata et al does not disclose an audio decoder, video decoder, sub-picture decoder, wherein each of the decoders may be selectively updated or replaced.

Sawabe et al teaches an audio decoder (93, fig. 16); a video decoder (88); and a sub-picture decoder (90).

Zdepski et al teaches updating the software for a decoder (col. 3, line 62 – col. 4, line 2). Therefore, it would have been obvious to update or replace any one of the decoding software.

It would have been highly desirable to have an audio, video, and sub-picture decoder so that the video is reproduced with accompanying audio and sub-picture data. It would have been highly desirable to update software so that improvements could be implemented.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to have an audio, video, and sub-picture decoder; and to update a software decoder in the device of Omata et al.

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Omata et al in view of Sawabe et al and Heo et al (5,987,417).

Regarding claim 11, Omata et al does not disclose decoding and converting a component data stream that conforms to a Dolby AC-3 coding standard; and decoding and converting a component data stream that conforms to a PCM coding standard.

Heo et al teaches decoding and converting a component data stream that conforms to a Dolby AC-3 standard and a PCM standard (col. 22, lines 55-65). Therefore, Heo et al teaches using one or more decoding standards to decode and convert the one or more component data streams.

It would have been highly desirable to decode and convert data conforming to the Dolby AC-3 standard and a PCM standard, since A/V data is commonly stored according to the standards on DVDs.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to decode and convert data conforming to the Dolby AC-3 standard and the PCM standard in the device of Omata et al.

7. Claims 12-13, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Omata et al in view of Sawabe et al, Heo et al, and Zdepski et al (5,825,884).

Regarding claims 12-13 and 31, Omata et al does not disclose that one or more decoding standards can be added or upgraded via software.

Heo et al teaches using one or more decoding standards to decode and convert the one or more component data streams, as discussed in the art rejection of claim 11.

Zdepski et al discloses updating the software for a decoder (col. 3, line 62 – col. 4, line 2). Therefore, it would have been obvious to update or replace any one of the decoding software.

It would have been highly desirable to upgrade or add new software so that the decoder can decode changed or new formats. For example, MPEG-1 was replace by a

new format MPEG-2. The software for decoding MPEG-1 could be updated or new software could be added to the CPU to allow decoding of MPEG-2.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to allow decoding standards to be upgraded or added via software in the device of Omata et al.

8. Claims 18 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Omata et al in view of Sawabe et al and Baumgartner et al (5,642,171).

Regarding claims 18 and 33, Omata et al does not disclose a sound card; an audio driver; a video graphics adapter; and a video driver.

Baumgartner et al teaches a sound card; an audio driver; a video graphics adapter; and a video driver (col. 1, lines 31-53 and col. 10, lines 40-64).

It would have been highly desirable to have a sound card; an audio driver; a video graphics adapter; and a video driver so that a DVD could be reproduced using a personal computer.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to have a sound card; an audio driver; a video graphics adapter; and a video driver in the device of Omata et al.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kushizaki, Kazami et al, and Kanda disclose video device using file structures.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Polin Chieu whose telephone number is (703) 308-6070. The examiner can normally be reached on M-Th 8:00 AM-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew B. Christensen can be reached on (703) 308-9644. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any response to this action should be mailed to:

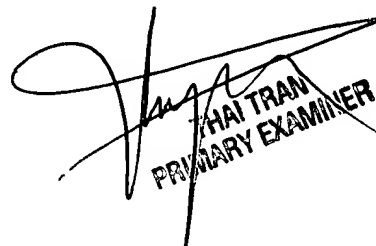
Commissioner of Patents and Trademarks

Washington, D.C. 20231

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

PC
April 17, 2004


PHAI TRAN
PRIMARY EXAMINER